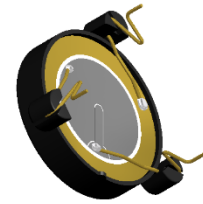




PUIaudio



Data Sheet

AILF-2830-TT-HT

Features:

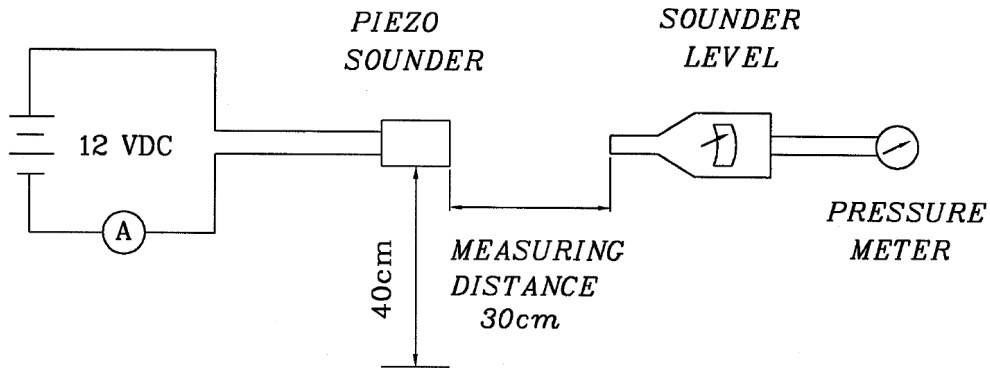
- Lead free 28.6mm Piezo Audio Indicator
- 12Vdc rated voltage
- Wide operating temperature range from -30°C to 85°C

Specifications

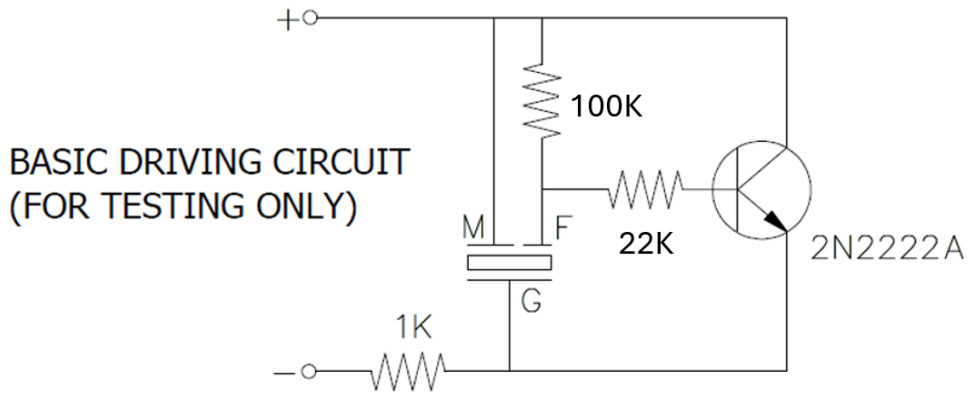
Parameters	Values	Units
Rated Voltage	12	VDC
Operating Voltage Range	3 ~ 28	VDC
Current Draw at Rated Voltage	8 max	mA
Minimum SPL @ 30cm	83	dBa
Tone or Pulse Rate	Continuous	0 pulse/sec
Resonant Frequency	3000 ± 500	Hz
Housing Material	ABS	-
Terminal Type	Pin (Plating Au)	-
Terminal Material	Au UL-94 1/16" HB High Heat (Black)	-
Weight	3.8	Grams
Acceptable Soldering Methods	Hand Solder	-
Environmental Compliances	ROHS/REACH	Buzzer ceramic meets RoHS 2.0 lead free requirement
Storage Temperature	-40 ~ +95	°C
Operating Temperature	-30 ~ +85	°C

Measurement Method (Temperature: 25±3°C; Relative Humidity: 60% ~ 70%)

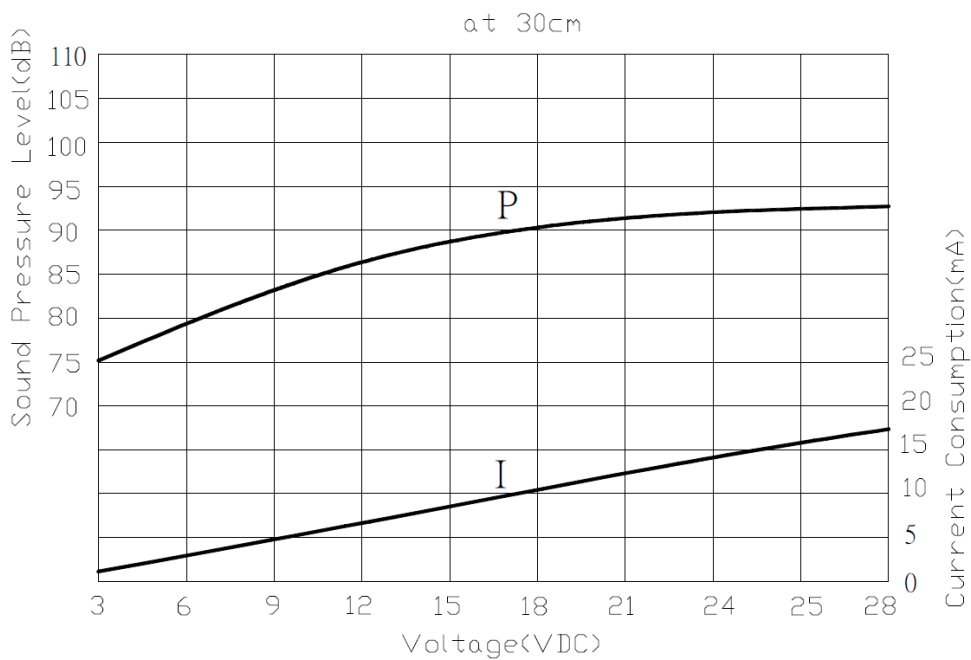
Standard Test Fixture (Distance: 30cm, 12VDC)



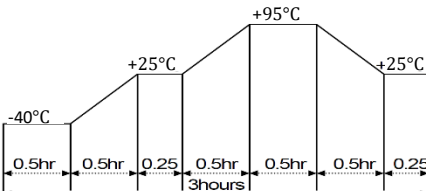
Basic Drive Circuit



Typical Frequency Response

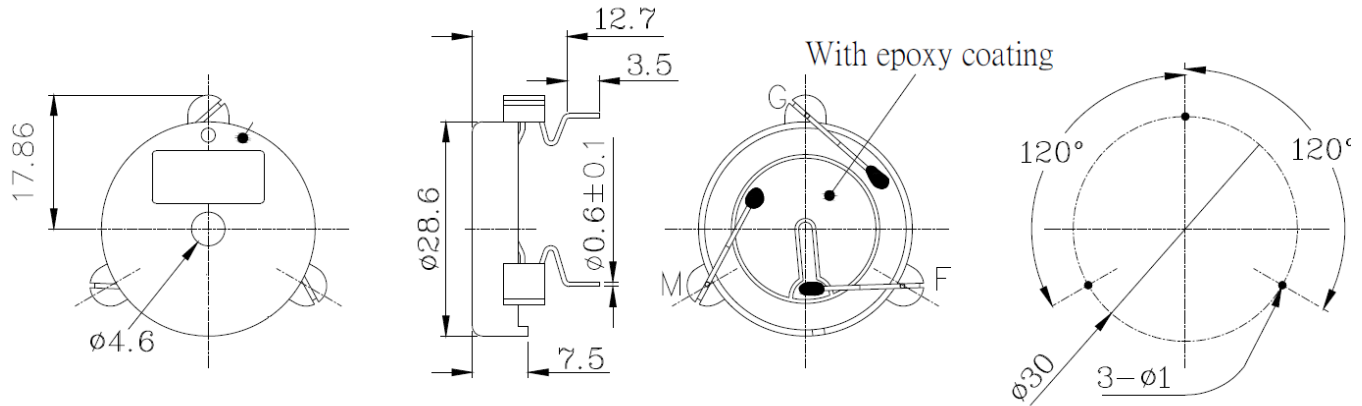


Reliability Testing

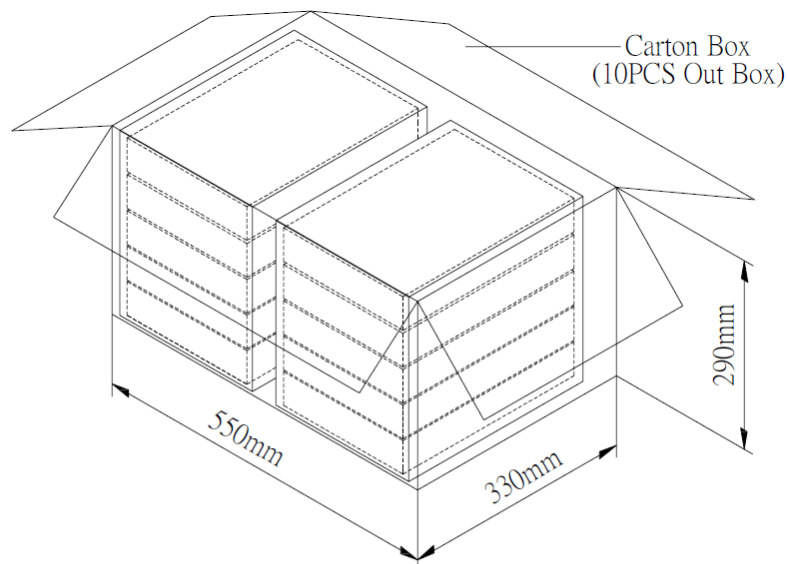
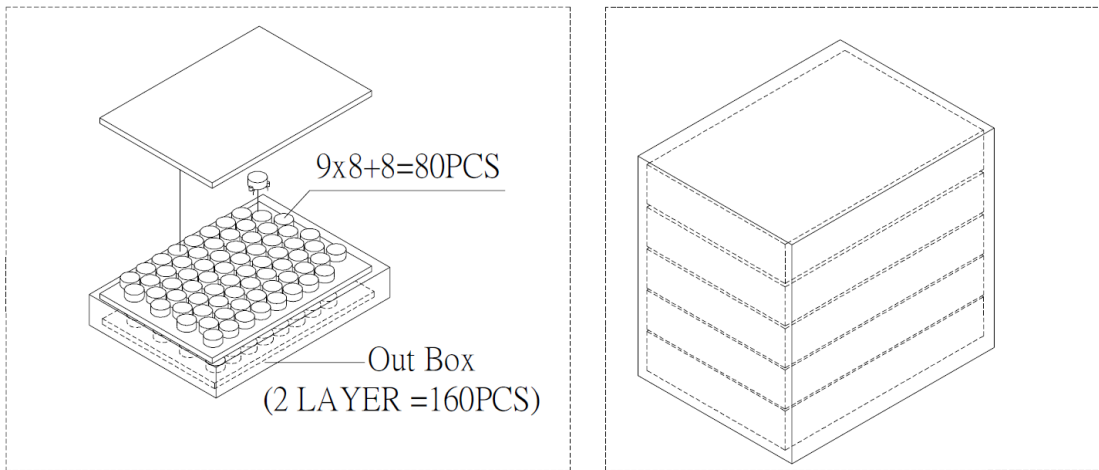
Type of Test	Test Specifications
High Temperature Test	Placed in chamber at +95°C for 240 hours, then rested for 4 hours at +25°C.
Low Temperature Test	Placed in chamber at -40°C for 240 hours, then rested for 4 hours at +25°C.
Humidity Test	Placed in chamber at +40°C and 90±5% RH for 240 hours, then rested for 4 hours at +25°C.
Temperature Cycle Testing	Run for 5 cycles with each cycle consisting of: 
Solderability	Lead terminals immersed in rosin for 5 seconds then immersed in solder bath of +270±5°C for 3±1 seconds.
Soldering Heat Resistance	Lead terminals immersed up to 1.5mm from part's body in solder bath of +300 for 3±0.5 seconds or +260±5°C for 10±1 seconds.
Terminal Strength Pulling	9.8N (1.0kg) force applied in each axial direction (X, Y, Z) to each terminal for 10 seconds.
Vibration Test	1.5mm amplitude vibration band between 10 ~ 55Hz applied to each direction (X, Y, Z) for 2 hours each (6 hours total).
Drop Test	Free drop a unit from the height 75cm to the surface of 40mm thick wooden board, 3 times in each direction (X, Y, Z) (9 times total).
Continuous Life Test	48 hours continuous operation at +70°C, at rated voltage.
Intermittent Life Test	1 minute on, 1 minutes off, minimum of 5000 times at +25±2°C, at rated voltage.

After each test, let rest for 4 hours, then the change in SPL shall be within ±10 dB. The value of resonant frequency/ current consumption should be in±10%

Dimensions



Packaging



Revision

Out Box	310mmx248mmx49mm	80PCSx2=160PCS
Carton Box	550mmx330mmx290mm	160PCSx10=1600PCS

te Approved

A	RELEASED FROM ENGINEERING	3/4/2024	NK
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Note:

- 1. Unless otherwise specified:
 - A. All dimensions are in millimeters.
 - B. Default tolerances are $\pm 0.5\text{mm}$ and angles are $\pm 3^\circ$.
- 2. Specifications subject to change or withdrawal without notice.